

IN THE CLAIMS:.

Please amend Claims 1, 3, 4 6 to 11, 13, 14, 16 to 18, 20 to 24 and 26 to 30 as follows. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) A communication control apparatus comprising:  
a controller that control means for, when a lower layer of a communication is disconnected while data is being transmitted to a different apparatus, permitting permits an upper layer of the communication to maintain a session for a predetermined period of time, and ~~for~~, when ~~a line~~ connection on the lower layer is re-established within ~~said~~ the predetermined period of time, permitting permits ~~said the~~ upper layer to ~~establish a connection for~~ continue the transmission of data.

2. (Original) A communication control apparatus according to claim 1, further comprising:

setting means for setting said predetermined time.

3. (Currently Amended) A communication control apparatus according to claim 1, wherein said ~~control means includes~~ controller comprises:

time determination means for determining whether ~~a~~ the predetermined time has elapsed;

re-connection determination means for determining whether a different apparatus in a session has been reconnected to a bus by the time said time determination means determines said predetermined time has elapsed;

login determination means for, when said reconnection means determines that said different apparatus has been re-connected, determining whether a login to said different apparatus has been successful;

reception determination means for, when said login determination means determines that said login has been successful, determining whether said different apparatus is capable of continuous reception; and

transmission means for, when said reception determination means determines that continuous reception has been enabled, transmitting data to said different apparatus.

4. (Currently Amended) A communication control apparatus according to claim 1, wherein said ~~control means includes~~ controller comprises:

time determination means for determining whether a the predetermined time has elapsed; and

clearing means for, when said time determination means determines that said predetermined time has elapsed, clearing data that are being transmitted.

5. (Original) A communication control apparatus according to claim 1, wherein said lower layer is a layer for ensuring the transmission of data, and detects a line disconnection or a line abnormality and performs a line disconnection process.

6. (Currently Amended) A communication control apparatus according to claim 1, wherein said lower layer includes a transport layer defined in an OSI layer 7

standard and below, and said upper layer includes a session layer defined in said OSI layer 7 standard and above.

7. (Currently Amended) A communication control apparatus according to ~~claim 1~~ claim 6, wherein SBP-2 is employed as a protocol for said transport layer and below.

8. (Currently Amended) A communication control apparatus according to claim 1, wherein IEEE 1394 is employed as a physical layer, which is the lowest layer of the lower layer.

9. (Currently Amended) A communication control apparatus according to claim 1, wherein said apparatus is a computer, and the different apparatus ~~being~~ is a printer.

10. (Currently Amended) A communication control apparatus according to claim 1, wherein disconnection of said lower layer occurs when said different apparatus is physically disconnected from a communication line, or when a new apparatus is connected to said communication line.

11. (Currently Amended) A communication control method comprising:  
controlling a communication such that a control step of, when a lower layer of the communication is disconnected while data is being transmitted to another apparatus,

~~permitting~~ an upper layer of the communication is permitted to maintain a session for a predetermined period of time, and for, when ~~a time~~ connection on the lower layer is re-established within ~~said~~ the predetermined period of time, ~~permitting said~~ the upper layer is permitted to ~~establish a connection for~~ continue the transmission of data.

12. (Original) A communication control method according to claim 11, further comprising:

a setting step of setting said predetermined time.

13. (Currently Amended) A communication control method according to claim 11, wherein said controlling step ~~includes~~ comprises:

a time determination step of determining whether a the predetermined time has elapsed;

a re-connection determination step of determining whether a different apparatus in a session has been reconnected to a bus by the time it is determined at said time determination step that said predetermined time has elapsed;

a login determination step of, when it is determined at said re-connection step that said different apparatus has been re-connected, determining whether a login to said different apparatus has been successful;

a reception determination step of, when it is determined at said login determination step that said login has been successful, determining whether said different apparatus is capable of continuous reception; and

a transmission step of, when it is determined at said reception determination step that continuous reception has been enabled, transmitting data to said different apparatus.

14. (Currently Amended) A communication control method according to claim 11, wherein said controlling step ~~includes~~ comprises:

a time determination step of determining whether a the predetermined time has elapsed; and

a clearing step of, when it is determined at said time determination step that said predetermined time has elapsed, clearing data that are being transmitted.

15. (Original) A communication control method according to claim 11, wherein said lower layer is a layer for ensuring the transmission of data, and detects a line disconnection or a line abnormality and performs a line disconnection process.

16. (Currently Amended) A communication control method according to claim 11, wherein said lower layer includes a transport layer defined in an OSI layer 7 standard and below, and said upper layer includes a session layer defined in said OSI layer 7 standard and above.

17. (Currently Amended) A communication control method according to ~~claim 11~~ claim 16, wherein SBP-2 is employed as a protocol for said transport layer and below.

18. (Currently Amended) A communication control method according to claim 11, wherein IEEE 1394 is employed as a physical layer, which is the lowest layer of the lower layer.

19. (Original) A communication control method according to claim 11, wherein said method is executed by a computer, and the different apparatus is a printer.

20. (Currently Amended) A communication control method according to claim 11, wherein disconnection of said lower layer occurs when said different apparatus is physically disconnected from a communication line, or when a new apparatus is connected to said communication line.

21. (Currently Amended) A machine-readable storage medium which stores a communication control program executed by an control apparatus, said communication control program comprising:

code for a controlling a communication step of that, when a lower layer of a communication is disconnected while data is being transmitted to another apparatus, permitting permits an upper layer of the communication to maintain a session for a predetermined period of time, and ~~for~~, when ~~a line~~ connection on the lower layer is re-established within ~~said the~~ predetermined period of time, ~~permitting said permits the~~ upper layer to ~~establish a connection for~~ continue the transmission of data.

22. (Currently Amended) A storage medium according to claim 21, wherein said communication control program further comprises:

code for a setting step of setting said predetermined time.

23. (Currently Amended) A storage medium according to claim 21, wherein said controlling step ~~includes~~ comprises:

code for a time determination step of determining whether a the predetermined time has elapsed;

code for a re-connection determination step of determining whether a different apparatus in a session has been reconnected to a bus by the time it is determined at said time determination step that said predetermined time has elapsed;

code for a login determination step of, when it is determined at said re-connection step that said different apparatus has been re-connected, determining whether a login to said different apparatus has been successful;

code for a reception determination step of, when it is determined at said login determination step that said login has been successful, determining whether said different apparatus is capable of continuous reception; and

code for a transmission step of, when it is determined at said reception determination step that continuous reception has been enabled, transmitting data to said different apparatus.

24. (Currently Amended) A storage medium according to claim 21, wherein said controlling step ~~includes~~ comprises:

code for a time determination step of determining whether a the predetermined time has elapsed; and

code for a clearing step of, when it is determined at said time determination step that said predetermined time has elapsed, clearing data that are being transmitted.

25. (Original) A storage medium according to claim 21, wherein said lower layer is a layer for ensuring the transmission of data, and detects a line disconnection or a line abnormality and performs a line disconnection process.

26. (Currently Amended) A storage medium according to claim 21, wherein said lower layer includes a transport layer defined in an OSI layer 7 standard and below, and said upper layer includes a session layer defined in said OSI layer 7 standard and above.

27. (Currently Amended) A storage medium according to ~~claim 21~~ claim 26, wherein SBP-2 is employed as a protocol for said transport layer and below.

28. (Currently Amended) A storage medium according to claim 21, wherein IEEE 1394 is employed as a physical layer, which is the lowest layer of the lower layer.

29. (Currently Amended) A storage medium according to claim 21, wherein said ~~medium~~ apparatus is ~~used by~~ a computer, and the different apparatus is a printer.



30. (Currently Amended) A storage medium according to claim 21, wherein disconnection of said lower layer occurs when said different apparatus is physically disconnected from a communication line, or when a new apparatus is connected to said communication line.